THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Claim 1. (Previously Presented) An acoustic apparatus comprising:

a headphone section mounted on a user's head having first and second headphone boxes arranged respectively on the ears of the user and having first and second microphone elements mounted respectively on the first and second headphone boxes for detecting sound around the user and signal acoustic transducing elements mounted respectively in the first and second headphone boxes functioning as sound sources with first output terminals for outputting microphone audio signals collected by the first and second microphone elements and first input terminals for inputting audio signals supplied to the first and second signal acoustic transducing elements; and

a control circuit section separate and independent from the headphone section and having second input terminals connected to the first output terminals and second output terminals connected to the first input terminals for controlling at least frequency characteristics and gain characteristics of the microphone audio signals from the first and second microphone elements of the headphone section input through the second input terminals, for generating a cancel audio signal for canceling effects of the sound around the user in the signals fed to the first and second signal

acoustic transducing elements, and for supplying the cancel audio signal to the first and second signal acoustic transducing elements of the headphone section through the second output terminals, whereby ambient sound around the user is cancelled in a range of 50 Hz to 1.5 kHz, said control circuit section further including recording means for recording the microphone audio signals output from the first and second microphone elements as binaural audio signals.

Claim 2. (Cancelled)

Claim 3. (Previously Presented) The acoustic apparatus according to claim 1, wherein the control circuit section further comprises:

means for adding different audio signals to the cancel audio signal using a signal audio converter element.

Claim 4. (Previously Presented) The acoustic apparatus according to claim 1, wherein the control circuit section further comprises:

means for adding different audio signals to the cancel audio signal using a signal audio converter element as a sound source; and

a remote control configured to supply remote-control signals for remotely controlling output of the different audio signals.

Claim 5. (Previously Presented) An acoustic apparatus

comprising:

a headphone section mounted on a user's head, having first and second headphone boxes arranged respectively on the ears of the user, first and second microphone elements mounted on the first and second headphone boxes for detecting sound around the user first and second signal acoustic transducing elements arranged in the first and second headphone boxes functioning as sound sources, first output terminals, an adjusting section for adjusting outputs of microphone audio signals collected by the first and second microphone elements, and first input terminals for inputting a cancel audio signal supplied to the first and second signal acoustic transducing elements, and

a control circuit section arranged in a housing separate and independent from the headphone section and having a second input terminals connected to the first output terminals and second output terminals connected to the first input terminals for controlling at least frequency characteristics and gain characteristics of the microphone audio signals from the first and second microphone elements of the headphone section input through the second input terminals, for generating the cancel audio signal that can serve as a sound source for canceling effects of the sound around the user, and for supplying the cancel audio signal to the first and second signal acoustic transducing elements of the headphone section through the second output terminals, whereby ambient sound around the user is cancelled in a range of 5 Hz to 1.5 kHz, said housing also

having arranged therein recording means for recording the microphone audio signals from the first and second microphone elements as binaural signals.

Claim 6. (Previously Presented) The acoustic apparatus according to claim 5, wherein an amplifier section is included in each first and second headphone box behind the adjusting section for amplifying the microphone audio signals from the first and second microphone elements and for adjusting the microphone audio signals from the first and second microphone elements, where gains are controlled by amplifying the microphone audio signals.

Claim 7. (Previously Presented) The acoustic apparatus according to claim 5, wherein an amplifier section for generating signals serving as a sound source for canceling the sound around the user and adjusting means for adjusting an output level of the amplifier section are provided in each first and second headphone box, and gains of the cancel audio first and second signal input to the signal acoustic transducing elements are controlled.

Claim 8. (Previously Presented) The acoustic apparatus according to claim 5, wherein an adjusting section adjusts the microphone audio signals from the first and second microphone elements that serve as sound sources for canceling the effects of the sound around the user and adjusts the microphone audio signals from the first and second microphone

elements in the first and second headphone boxes,

said adjusting means having operating means operable by the user from outside the first and second headphone boxes, and

an amplifier section for amplifying the microphone audio ~~signal~~ signals adjusted at the adjusting section.

Claim 9. (Previously Presented) An acoustic apparatus comprising:

a recording/playback device;

a headphone section mounted on a user's head, having first and second headphone boxes arranged respectively on the ears of the user and having first and second microphone elements for detecting sound around the user and first and second signal acoustic transducing elements functioning as sound sources with first output terminals for outputting microphone audio signals collected by the first and second microphone elements and first input terminals for inputting a cancel audio signal supplied to the first and second signal acoustic transducing elements; and

a remote control connected to said recording/playback device for controlling operation of said recording/playback device and feeding the microphone audio signals to the recording/playback device for recording as binaural signals, said remote controller being separate and independent from the headphone section and including a control section having second input terminals connected to the first output terminals

and second output terminals connected to the first input terminals for controlling at least frequency characteristics and gain characteristics of the microphone audio signals from the first and second microphone elements of the headphone section input through the second input terminals, with said frequency characteristics and gain characteristics being adjusted to achieve a predetermined level at a predetermined frequency between 50 Hz and 1.5 kHz, for generating the cancel audio signal that can cancel the ambient sound around the user within a range of 50 Hz to 1.5 kHz, and for supplying the cancel audio signal to the first and second signal acoustic transducing elements of the headphone section through the second output terminals.

Claim 10. (Previously Presented) An acoustic apparatus comprising:

a headphone section mounted on a user head, having a microphone elements mounted on the first and second headphone boxes for detecting sound around the user and first and second signal acoustic transducing element functioning as sound sources with first output terminals for outputting microphone audio signals collected by the first and second microphone elements and first input terminals for inputting a cancel audio signal supplied to the first and second signal acoustic transducing elements;

a control circuit section arranged in a housing separate and independent from the headphone section and having second input terminals connected to the first output terminals and a

second output terminals connected to the first input terminal for controlling at least frequency characteristics and gain characteristics of the microphone audio signals from the first and second microphone elements of the headphone section input through the second input terminals, for generating the cancel audio signal for canceling the effects of the ambient sound around the user within a range of 50 Hz to 1.5 kHz, and for supplying the cancel audio signal to the first and second signal acoustic transducing elements of the headphone section through the second output terminals, and a recording/playback device arranged in the housing for recording the microphone audio signals from the first and second microphone elements as binaural audio signals; and

a circuit configuration for canceling the surrounding sound used by the control circuit section that is of a feed-forward system.

Claim 11. (Previously Presented) An acoustic apparatus comprising:

a recording/playback device;

a headphone section mounted on a user's head, having first and second headphone boxes arranged on respective ears of the user and having first and second microphone elements arranged respectively on the first and second headphone boxes for detecting sound around the user and first and second signal acoustic transducing elements functioning as sound sources housed in first and second headphone boxes,

respectively, with first output terminals for outputting microphone audio signals collected by the first and second microphone elements and first input terminals for inputting a cancel audio signal supplied to the first and second signal acoustic transducing elements for canceling effects of ambient sound around the user within a range of 50Hz to 1.5kHz;

a remote controller connected to said recording/playback device for controlling operation of said recording/playback device and feeding the microphone audio signals to the recording/playback device for recording as binaural audio signals, said remote controller being separate and independent from the headphone section and including a control circuit section having second input terminals connected to the first output terminals and second output terminals connected to the first input terminals for controlling at least frequency characteristics and gain characteristics of the microphone audio signals from the first and second microphone elements of the headphone section input through the second input terminals, for generating the cancel audio signal for canceling effects of the sound around the user, and for supplying the cancel audio signal to the first and second signal acoustic transducing elements of the headphone section through the second output terminals; and

a circuit configuration for canceling the effects of the sound surrounding the user used by the control circuit section that is of a feedback system.

Claim 12 - 15. (Cancelled)